Postgraduate Certificate
Industrial Pattern Making

tech global university

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Postgraduate Certificate
Industrial Pattern Making

- Modality: **online**
- Duration: **6 weeks**
- Certificate: **TECH Global University**
- Credits: **6 ECTS**
- Schedule: **at your own pace**
- Exams: **online**

Website: **www.techtitute.com/us/engineering/postgraduate-certificate/industrial-pattern-making**

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01

Introduction

Industrial Pattern Making is a key area in the production of garments, since it allows the design of precise patterns adjusted to the measurements of the human body. It is applied in various sectors, such as fashion, clothing or uniform production. In addition, the application of technology in Industrial Pattern Making has allowed for faster, more accurate and efficient production. All this makes it a sector in full expansion that requires highly qualified professionals to meet the growing demand. For this reason, TECH has created this academic degree in which the professional will acquire the manual and automatic tools for the realization of fabric cutting. This is a 100% online program that allows you to combine this course with other aspects of your life.

Get all the tools and access them 24 hours a day so that you can set the pace of your studies in the most advanced and innovative academic scenario”

Industrial Patter Making is an area in constant evolution and growth, since its application is wide in different sectors such as fashion and clothing. The demand for skilled professionals in this field is increasing, as precise patterns adjusted to the measurements of the human body are required.

In this context, TECH has created an academic degree that seeks to respond to the demands of the sector, providing solid knowledge in the calculation of a marker according to the performance parameters of the fabric. This way, the program seeks to prepare highly qualified and up-to-date professionals in Industrial Pattern Making, who can respond to the needs of a constantly changing and growing market.

This TECH academic degree offers a 100% online format, which allows the students to combine this course with other aspects of their lives without having to give up anything. In addition, the program's methodology is designed to provide the student with a comprehensive and practical training in Industrial Pattern Making. Also, the degree is taught under the effective *Relearning*method, which combines real cases, the resolution of complex situations by simulation, the study of clinical cases and a repetition-based learning. The graduate will integrate knowledge in a natural and efficient process.

This **Postgraduate Certificate in Industrial Pattern Making** contains the most complete and up-to-date program on the market. The most important features include:

- Development of case studies presented by experts in Textile Engineering
- The graphic, schematic and practical contents with which it is conceived, gather rigorous and practical information on disciplines that are essential for professional practice
- Practical exercises where the self-assessment process can be carried out to improve learning
- Its special emphasis on innovative methodologies
- Theoretical lessons, questions to the expert, debate forums on controversial topics, and individual reflection assignments
- Content that is accessible from any fixed or portable device with an Internet connection

You will be able to download all the content to your electronic device from the Virtual Campus and consult it whenever you need it”

With TECH you will deepen in the study of the technical quality control method to ensure the highest nobility in the product"

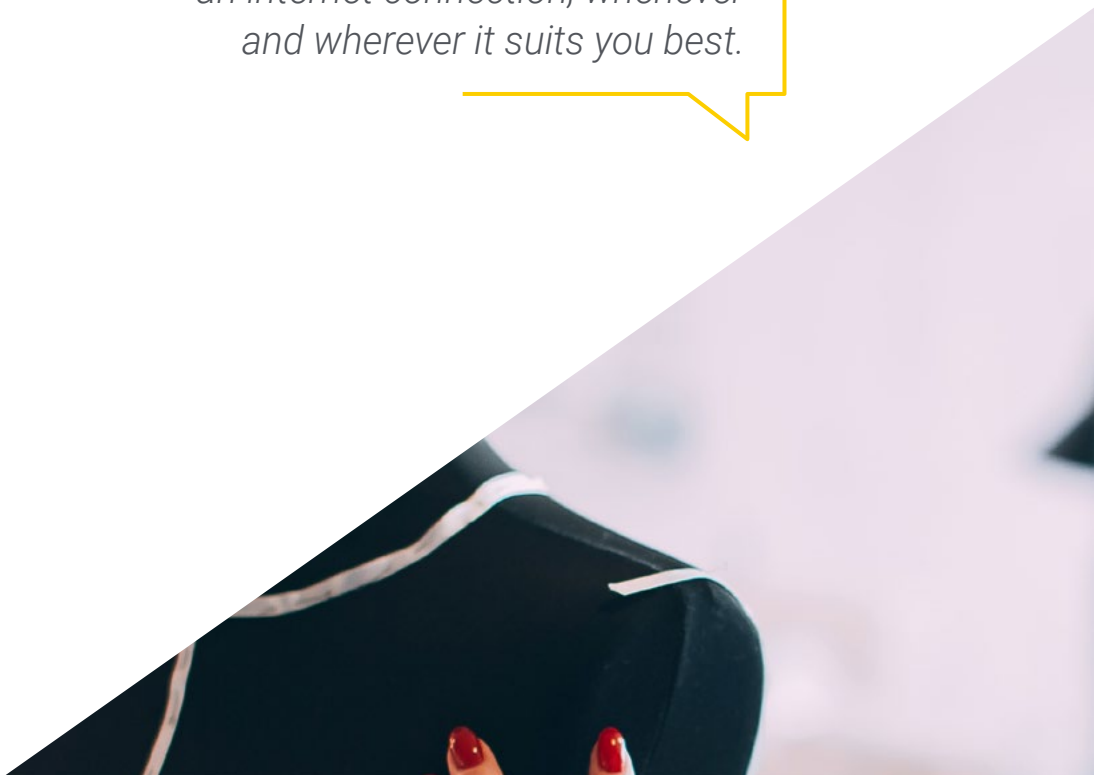
Improve your career projection thanks to the mastery of production systems in the garment industry.

You will be able to download all the content to your preferred device and consult it even without an internet connection, whenever and wherever it suits you best.

The program includes in its teaching staff professionals from the sector who bring to this course the experience of their work, as well as renowned specialists from prestigious societies and universities.

Its multimedia content, developed with the latest educational technology, will provide the professional with situated and contextual learning, i.e., a simulated environment that will provide an immersion education programmed to learn in real situations.

The design of this program focuses on Problem-Based Learning, by means of which the professional must try to solve the different professional practice situations that are presented throughout the academic course. For this purpose, students will be assisted by an innovative interactive video system developed by renowned experts.



02

Objectives

Throughout the 180 hours of education of this degree program, the engineering professional will be able to acquire in-depth knowledge of Industrial Pattern Making. This way, the syllabus has been designed by a specialized teaching team that will present in a dynamic and visual way the elaboration of basic patterns, as well as the transformation and industrialization techniques of male, female and children's patterns.

Get closer to professional excellence with theoretical and practical tools that will make it easier for you to make decisions in real life"

General Objectives

- Classify the different types of fibers according to their nature
- Determine the main physical characteristics of textiles
- Acquire technical skills to recognize the quality of textiles
- Establish scientific and technical criteria for the selection of suitable materials for the development of textile articles in the fashion sector
- Identify and apply the sources of inspiration and the most innovative trends in the textile area
- Generate a transversal vision of textile structures with a multisectorial vision of its applications

Specific Objectives

- Analyze and develop patterns for a complete fashion collection
- Develop the scaling according to the size chart
- Determine the tools used for pattern making and cutting tools
- Examine trends and innovations in pattern making technology and methodology

Become an expert by identifying sources of inspiration and the most cutting-edge trends in the textile area"

03

Course Management

Aware of the importance of having a team of experienced professionals in the area to guide the student, TECH has carefully selected the faculty for this program. These professionals are highly qualified and have extensive experience in the field of Textile Engineering, which ensures that students have access to the most innovative and relevant content. In addition, the teaching method used, *Relearning*, is highly efficient and effective.

Improve your skills with the support of a professional team that has prepared this exhaustive syllabus and with which you will solve simulations of real cases in the Virtual Campus"

Management

Dr. González López, Laura

- Expert in Textile and Paper Engineering
- Textile Innovation Production Manager at *Waste Prevention* SL
- Pattern and garment maker oriented to the automotive sector
- Researcher in the Tectex group
- Lecturer in undergraduate and postgraduate university studies
- D. in Textile and Paper Engineering from the Polytechnic University of Catalonia
- Graduate in Political Science and Administration from the Autonomous University of Barcelona
- PROFESSIONAL MASTER'S DEGREE in Textile and Paper Engineering

Professors

Ms. Galí Pérez, Susan

- Expert in Industrial Pattern Making and Fashion
- Responsible of management and production of fashion and luxury garments collections at Yolancris
- Responsible for the management and production of fashion, accessories and children's wear collections at Mandragora
- Designer and dressmaker of lingerie and corsetry
- Handcrafted and tailor-made dressmaker
- Designer and producer of stage costumes for theater companies
- Lecturer in courses related to Fashion
- Superior Technician in Industrial and Fashion Pattern Making
- Postgraduate in Advanced and Creative Patternmaking

Ms. Ruiz Caballero, Ainhoa

- Specialist in the sports textile industry
- Commercial team leader of technical textile products for extreme sports at *McTrek Retail GmbH Aachen*
- Technician specialized in textile products Hightech for high mountain at *McTrek Outdoor Sports GmbH Aachen*
- Degree in Political Science and Law from the Polytechnic University of Catalonia
- Master's Degree in European Union by the European Institute of Bilbao

04

Structure and Content

Through a complete degree, TECH offers an innovative didactic experience based on the *Relearning*method, which involves the constant reiteration of the most important concepts throughout the syllabus to achieve a natural and comprehensive integration of knowledge. This way, graduates acquire specific skills and competencies in an efficient and dynamic manner, without the need to invest time in the tedious memorization task. And to facilitate the student's task, the program is completely online and offers the most complete theoretical and practical content available on the market, allowing the student to delve deeper into the properties of the fabrics.

With the Relearning method, you will obtain in-depth knowledge in a progressive manner and with total flexibility. A program that fits your needs"

Module 1. Pattern Making Techniques in the Fashion Industry

1.1. Pattern-making methods
- 1.1.1. Pattern making on mannequins. Tailor-made pattern making
- 1.1.2. Industrial pattern making. Pattern making techniques according to different academies
- 1.1.3. Specific pattern making. Corsetry, tailoring, lingerie and knitwear

1.2. Pattern making techniques on mannequins
- 1.2.1. Elaboration of patterns according to the Moulage technique
- 1.2.2. Pattern making according to Deppari's technique
- 1.2.3. Pattern making according to the Eometric Technique

1.3. Men's industrial pattern making
- 1.3.1. Determination of measurements and distribution of sizes according to size charts
- 1.3.2. Elaboration of basic patterns: Body, sleeves, pants and outerwear garments
- 1.3.3. Transformation and industrialization techniques of male patterns

1.4. Women's Industrial Pattern Making
- 1.4.1. Determination of measurements and distribution of sizes according to size charts
- 1.4.2. Elaboration of basic patterns: Body, sleeves, pants and outerwear garments
- 1.4.3. Techniques of transformation and industrialization of female patterns

1.5. Industrial pattern making for children
- 1.5.1. Determination of measurements and distribution of sizes according to size charts
- 1.5.2. Elaboration of basic patterns for infants and children from 0 to 12 years of age
- 1.5.3. Techniques for the transformation and industrialization of children's patterns

1.6. Digitalization and scaling of patterns
- 1.6.1. Automatic pattern digitizing systems
- 1.6.2. Manual and industrial systems for pattern scaling
- 1.6.3. Calculation and distribution of measurements in the standard scaling process

1.7. Sizing theory
- 1.7.1. Sizing according to type of fabrics
- 1.7.2. Manual and automatic methodologies for sizing
- 1.7.3. Sizing calculation according to fabric performance parameters

1.8. Cutting methodologies and systems
  1.8.1. Fabric cutting. Production plan
  1.8.2. Manual and automatic tools for the fabric cutting process
  1.8.3. Preparation and distribution of cutting packs prior to the manufacturing process
1.9. Production systems in the garment industry
  1.9.1. Manual production systems in the garment industry
  1.9.2. Automated and synchronized production systems in the clothing industry
  1.9.3. Unit production systems in the garment industry
1.10. Quality control in the garment industry
  1.10.1. Study of the technical quality control method
  1.10.2. International standards and protocols of action
  1.10.3. Principles of quality control in clothing manufacturing

A complete syllabus to become the next expert in Industrial Pattern Making"

05

Methodology

This academic program offers students a different way of learning. Our methodology uses a cyclical learning approach***: Relearning.***

This teaching system is used, for example, in the most prestigious medical schools in the world, and major publications such as the ***New England Journal of Medicine*** have considered it to be one of the most effective.

Discover Relearning, a system that abandons conventional linear learning, to take you through cyclical teaching systems: a way of learning that has proven to be extremely effective, especially in subjects that require memorization"

Case Study to contextualize all content

Our program offers a revolutionary approach to developing skills and knowledge. Our goal is to strengthen skills in a changing, competitive, and highly demanding environment.

At TECH, you will experience a learning methodology that is shaking the foundations of traditional universities around the world"

You will have access to a learning system based on repetition, with natural and progressive teaching throughout the entire syllabus.

The student will learn to solve complex situations in real business environments through collaborative activities and real cases.

A learning method that is different and innovative

This TECH program is an intensive educational program, created from scratch, which presents the most demanding challenges and decisions in this field, both nationally and internationally. This methodology promotes personal and professional growth, representing a significant step towards success. The case method, a technique that lays the foundation for this content, ensures that the most current economic, social and professional reality is taken into account.

> *Our program prepares you to face new challenges in uncertain environments and achieve success in your career"*

The case method is the most widely used learning system in the best faculties in the world. The case method was developed in 1912 so that law students would not only learn the law based on theoretical content. It consisted of presenting students with real-life, complex situations for them to make informed decisions and value judgments on how to resolve them. In 1924, Harvard adopted it as a standard teaching method.

What should a professional do in a given situation? This is the question that you are presented with in the case method, an action-oriented learning method. Throughout the program, the studies will be presented with multiple real cases. They will have to combine all their knowledge and research, and argue and defend their ideas and decisions.

Relearning Methodology

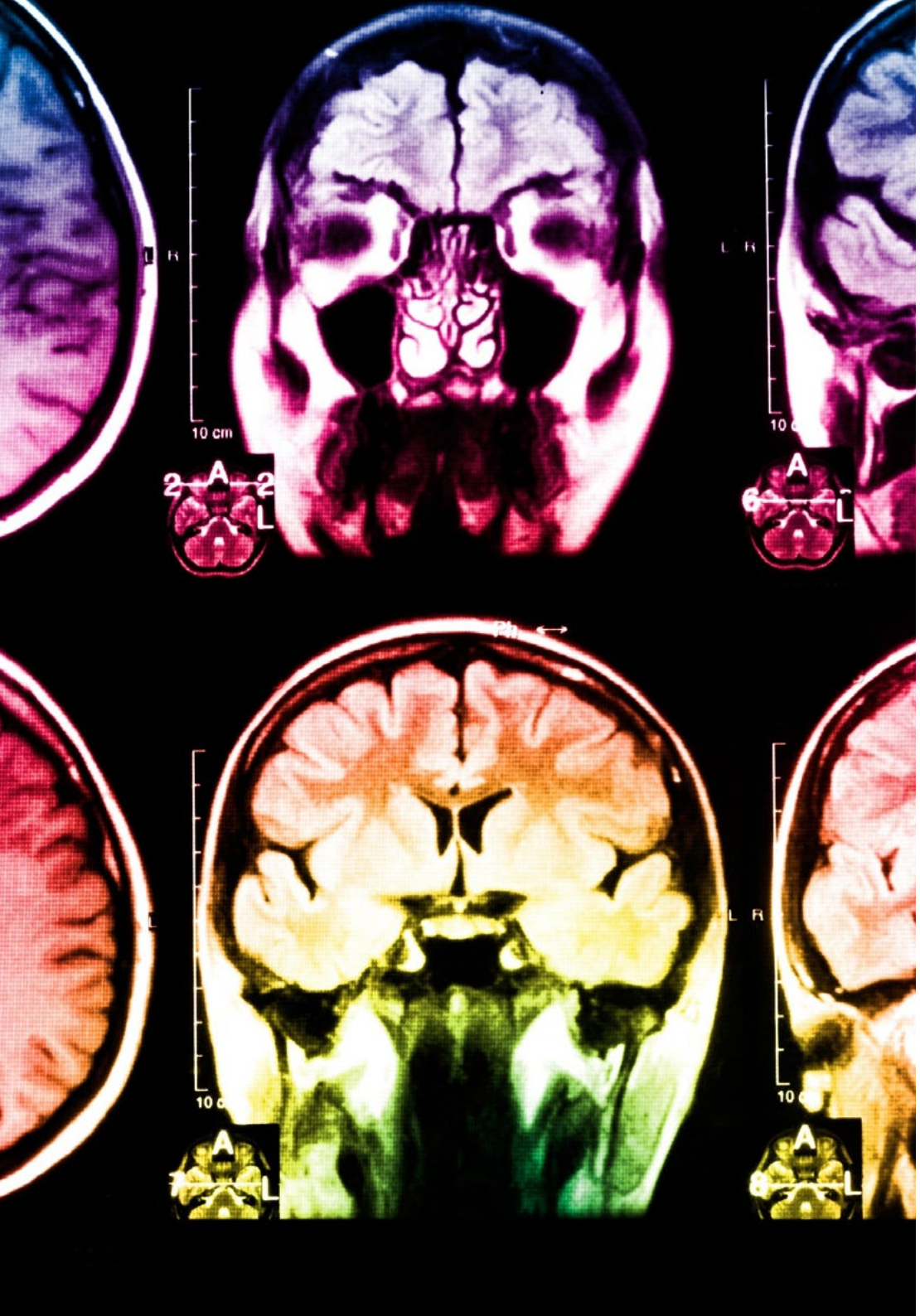
TECH effectively combines the Case Study methodology with a 100% online learning system based on repetition, which combines 8 different teaching elements in each lesson.

We enhance the Case Study with the best 100% online teaching method: Relearning.

In 2019, we obtained the best learning results of all online universities in the world.

At TECH, you will learn using a cutting-edge methodology designed to train the executives of the future. This method, at the forefront of international teaching, is called Relearning.

Our university is the only one in the world authorized to employ this successful method. In 2019, we managed to improve our students' overall satisfaction levels (teaching quality, quality of materials, course structure, objectives...) based on the best online university indicators.



In our program, learning is not a linear process, but rather a spiral (learn, unlearn, forget, and re-learn). Therefore, we combine each of these elements concentrically. This methodology has trained more than 650,000 university graduates with unprecedented success in fields as diverse as biochemistry, genetics, surgery, international law, management skills, sports science, philosophy, law, engineering, journalism, history, and financial markets and instruments. All this in a highly demanding environment, where the students have a strong socio-economic profile and an average age of 43.5 years.

Relearning will allow you to learn with less effort and better performance, involving you more in your training, developing a critical mindset, defending arguments, and contrasting opinions: a direct equation for success.

From the latest scientific evidence in the field of neuroscience, not only do we know how to organize information, ideas, images and memories, but we know that the place and context where we have learned something is fundamental for us to be able to remember it and store it in the hippocampus, to retain it in our long-term memory.

In this way, and in what is called neurocognitive context-dependent e-learning, the different elements in our program are connected to the context where the individual carries out their professional activity.

This program offers the best educational material, prepared with professionals in mind:

Study Material

All teaching material is produced by the specialists who teach the course, specifically for the course, so that the teaching content is highly specific and precise.

These contents are then applied to the audiovisual format, to create the TECH online working method. All this, with the latest techniques that offer high quality pieces in each and every one of the materials that are made available to the student.

Classes

There is scientific evidence suggesting that observing third-party experts can be useful.

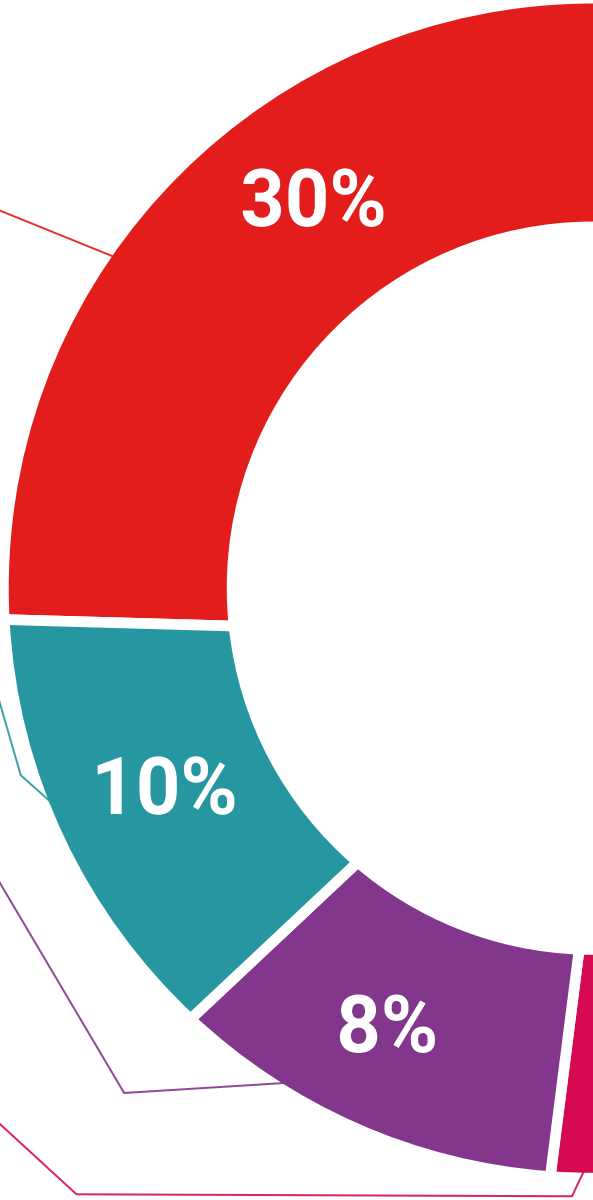
Learning from an Expert strengthens knowledge and memory, and generates confidence in future difficult decisions.

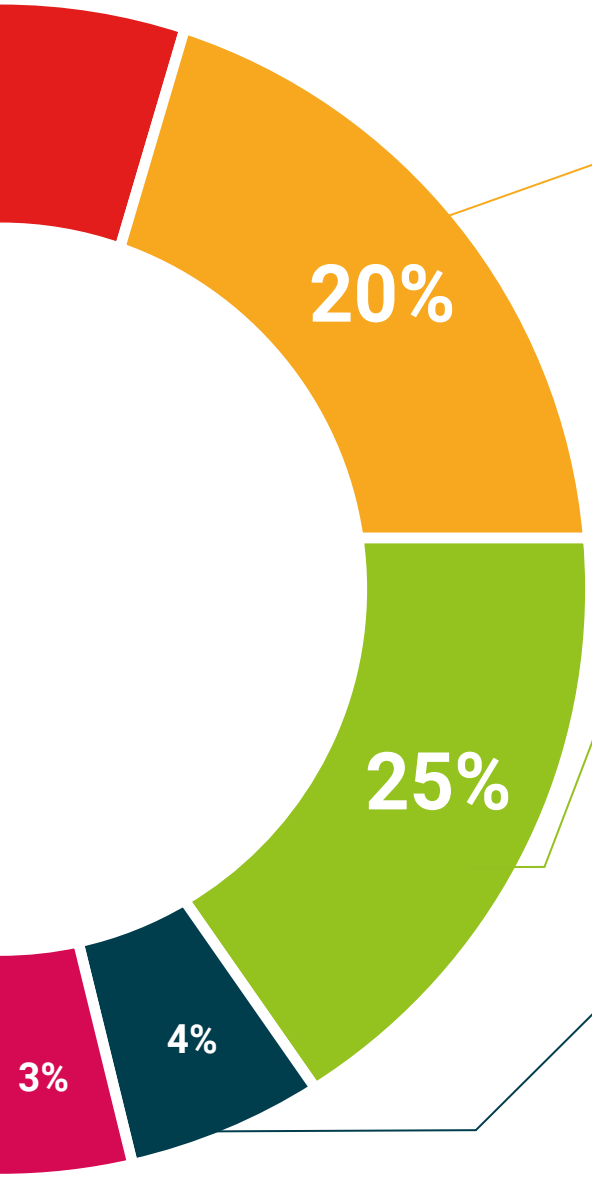
Practising Skills and Abilities

They will carry out activities to develop specific skills and abilities in each subject area. Exercises and activities to acquire and develop the skills and abilities that a specialist needs to develop in the context of the globalization that we are experiencing.

Additional Reading

Recent articles, consensus documents and international guidelines, among others. In TECH's virtual library, students will have access to everything they need to complete their course.





Case Studies

Students will complete a selection of the best case studies chosen specifically for this program. Cases that are presented, analyzed, and supervised by the best specialists in the world.

Interactive Summaries

The TECH team presents the contents attractively and dynamically in multimedia lessons that include audio, videos, images, diagrams, and concept maps in order to reinforce knowledge.

This exclusive educational system for presenting multimedia content was awarded by Microsoft as a "European Success Story".

Testing & Retesting

We periodically evaluate and re-evaluate students' knowledge throughout the program, through assessment and self-assessment activities and exercises, so that they can see how they are achieving their goals.

06

Certificate

The Postgraduate Certificate in Industrial Pattern Making guarantees students, in addition to the most rigorous and up-to-date education, access to a Postgraduate Certificate issued by TECH Global University.

Successfully complete this program and receive your university qualification without having to travel or fill out laborious paperwork"

This program will allow you to obtain your **Postgraduate Certificate in Industrial Pattern Making** endorsed by **TECH Global University**, the world's largest online university.

TECH Global University is an official European University publicly recognized by the Government of Andorra (*official bulletin*). Andorra is part of the European Higher Education Area (EHEA) since 2003. The EHEA is an initiative promoted by the European Union that aims to organize the international training framework and harmonize the higher education systems of the member countries of this space. The project promotes common values, the implementation of collaborative tools and strengthening its quality assurance mechanisms to enhance collaboration and mobility among students, researchers and academics.

This **TECH Global University** title is a European program of continuing education and professional updating that guarantees the acquisition of competencies in its area of knowledge, providing a high curricular value to the student who completes the program.

Title: **Postgraduate Certificate in Industrial Pattern Making**

Modality: **online**

Duration: **6 weeks**

Accreditation: **6 ECTS**

tech global university

Mr./Ms. _____, with identification document _____
has successfully passed and obtained the title of:

Postgraduate Certificate in Industrial Pattern Making

This is a program of 180 hours of duration equivalent to 6 ECTS, with a start date of dd/mm/yyyy and an end date of dd/mm/yyyy.

TECH Global University is a university officially recognized by the Government of Andorra on the 31st of January of 2024, which belongs to the European Higher Education Area (EHEA).

In Andorra la Vella, on the 28th of February of 2024

Dr. Pedro Navarro Illana
Rector

This qualification must always be accompanied by the university degree issued by the competent authority to practice professionally in each country.

Unique TECH Code: AFWORD23S techtitute.com/certificates

*Apostille Convention. In the event that the student wishes to have their paper diploma issued with an apostille, TECH Global University will make the necessary arrangements to obtain it, at an additional cost.

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